

**HIGH SPEED DATA COMPRESSION AND
DECOMPRESSION APPARATUS AND METHOD**

ABSTRACT OF THE DISCLOSURE

A method for compressing a stream of data signals into a compressed
5 stream of code signals is provided. The compression method including: storing strings of
the data signals encountered in the stream of data signals in a dictionary, the stored strings
each having a corresponding code signal; searching the stream of data signals by
comparing the stream to the stored strings to determine the longest match therewith;
searching the remaining stream of data signals by comparing the remaining stream to the
10 stored strings to determine the longest match therewith; inserting into the dictionary an
extended string made up of the longest match with the stream of data signals extended by
the longest match with the remaining stream of said data signals; and assigning a code
signal corresponding to the stored extended string.